

FWHCA Update Technical Advisory Group (TAG)

October 22, 2013 Meeting Summary

Noon to 4pm
Commissioner's Hearing Room
1 NE 6th Street
Coupeville, WA

Attendees: Sarah Cassat (Whidbey Island Conservation District), Lowell Dickson (teleconference) (Washington Department of Natural Resources), Karen DuBose (Island County), Steve Erickson (Whidbey Environmental Action Network), Tim Hyatt (Skagit River System Cooperative), Doug Kelly (Island County), Pat Powell (Whidbey Camano Land Trust), Amber Raynsford (Watershed Co – Island County's Consultant), Heather Roberts (Island County), Sarah Schmidt (Whidbey Audubon), Stephen Stanley (DOE – Watershed Characterization Technical Advisory Team), Kira Swanson (Island County), Jennifer Thomas (Parametrix – Island County's consultant), Doug Thompson (Washington Department of Fish and Wildlife), George Wilhere (teleconference) (WDFW – Watershed Characterization Technical Advisory Team)

Introductions

Review of Agenda and Meeting objectives

- Meeting objectives include:
 - Review/discuss baseline and analysis maps
 - Understand Watershed Characterization map results
 - Use decision matrix to determine use of maps moving forward

Discussion of Water Flow and Water Quality Maps

- Because Island County's hydrogeologist, Doug Kelly, and Water Quality Specialists Karen DuBose and Heather Roberts, were able to attend the meeting, the TAG decided to review the water quality and water flow maps first.
- Jennifer Thomas explained that in Island County there are lowland and coastal units. Coastal assessment units are small discrete (1-3 square miles) units. The lowland units are larger. The model compares these units against each other.
 - Question regarding how the units are compared.
 - Jennifer Thomas explained that in the water flow models coastal units are compared to coastal units and lowland are compared to lowland units. Jennifer says for the purpose of this model we just compared watersheds in Island County and did not compare Puget Sound wide.
 - Question regarding whether if in Island County where there are all these little fairly independent watersheds, if it would be better to

- have them all as the same until and just compare them to each other.
 - Question whether the model could evaluate the watersheds as the same assessment unit.
- Discussion regarding Map WF-1. Overall Importance for Water Flow by Landscape Group
- Discussion regarding Map WF-2. Overall Degradation to Water Flow
 - Stephen Stanley explains that the degradation model ignores the landscape group because degradation is degradation in spite of where it is located.
- Discussion regarding Map WF-3. Restoration and Protection
 - Stephen Stanley explains that this map combines several of the model components.
 - Suggestion that it would be helpful to have a one paragraph description of how the map was generated.
- Discussion regarding Map WF-4. Importance of Surface Storage by Landscape Group.
 - Question regarding the model interpretation
 - Stephen Stanley explained that importance is assigned to areas with high relative storage.
 - Suggestion that the Watershed Characterization model would be more helpful for the Comprehensive Plan update.
 - Stephen Stanley responded to that the Watershed Characterization model had not yet been used to update FWHCA regulations.
- Questions regarding how the maps are going to be used to inform the FWHCA update.
 - Kira Swanson explained that the intent of the Watershed Characterization is to look at the larger ecological processes that are occurring within Island County in order to see if there are more effective ways to maintain these processes beyond the traditional methods of site specific regulations.
 - Suggestion that Watershed Characterization is a better tool for the Comprehensive Plan update than the FWHCA update. The model seems more appropriate for examining zoning.
 - Clarification that through the FWHCA update Island County is trying to determine two things: 1) what critical areas are under the ordinance and 2) how the identifies critical areas will be protected.
 - Strong concerns expressed that the Watershed Characterization model is too coarse to be useful during the update.
 - Jennifer Thomas explains that the Watershed Characterization model is a piece of best available science that should be considered in the update.
 - Suggestion that protected areas also be included on the maps.
 - TAG decided to take a step back from the Watershed Characterization maps and focus on the finer scale Vicinity Map.
- Discussion regarding Map 1. Vicinity/Regional Context Map

- Amber Raynsford walks through the legend.
- Suggestion that all the NHP data be included on the map.
- Jennifer Thomas clarifies that the county and consultants are seeking feedback and asks that the TAG members identify missing data. TAG members are asked to send Kira Swanson any data sets or information that is missing.
- Suggestion that mapping will never be perfect and question regarding how that will be addressed within the CAO. Suggestion that there should be provisions to ensure that those species that are not mapped be identified through site specific surveys.
- Question if critical areas should be identified in the shoreline based on discussion of SMA and GMA.
- Kira Swanson responded yes and explained that the FWHCA update will not be addressing direct impacts to critical areas from activities within the shoreline jurisdiction because these activities are regulated under the Shoreline Master Program (SMP). However, because activities in the uplands can impact FWHCAs within the shoreline they still need to be identified and mapped.
- Strong suggestion that not examining the impacts of activities within shoreline jurisdiction is creating a large gap in the BAS. This needs addressed by Island County and Island County should examine these impacts within the BAS of the FWHCA update.
- Discussion regarding Map WF-7. Importance and Recharge by Landscape Group
 - Doug Kelly explained that Island County hired USGS to do a study about groundwater recharge. He feels that study is more detailed and robust than the data included in the model. The USGS study would likely be able to provide more accurate information than what is provided by the model.
 - Discussion of whether or not it would be possible to incorporate the USGS data.
 - Kira Swanson and Doug Kelly will work to get the data to the consultants.
 - Question regarding the relevance of this information to FWHCA update.
 - Suggestion that if the ground water is being over drawn, then this could be affecting streams and reducing or drying up the streams.
 - TAG begins examining Map A-5. Overall Degradation to Water Flow with Well Density Overlay.
 - Jennifer Thomas explains that this map illustrates well density and there are a bunch of wells near a salmon bearing stream then that is something to potentially examine.
 - Doug Kelly explains that all wells are not the same. He says there are some public water system and these need to be considered with the number of connections.

- Kira Swanson and Doug Kelly will work to get the consultants the public well data.
- Doug Kelly suggested that wells screened below sea level are likely not affecting terrestrial systems. He says this is about 70% of the wells.
- Amber Raynsford explains the maps can be recreated with Doug's well information. They will look similar, but will reflect the data Doug provides.
- Doug Kelly explains that near-shore wells completed above sea level also likely don't discharge to streams.
- Suggestion that this should be considered because streams that discharge off bluffs can be a hotspot for ecology.
- Question about how much water needs to be in streams. Discussion that there isn't time in this update to consider that and that is a water right issue.
 - Doug Kelly explained that most of the wells in Island County are exempt from the requirement to obtain water rights because they are below the withdrawal threshold. As a result, the Washington Department of Ecology has little direct involvement, the primary means of regulating these wells at the county level.
 - Doug Kelly explained that most of the discharge that occurs in Island County is submarine.
 - Question if any work has been done in Island County to determine if streams within the county are in threat of being dried up.
 - Doug Kelly said he doesn't know of any such studies. He explains that under the Growth Management Act when water flow is reviewed it is reviewed for development (meaning is there sufficient water to support wells). He says it isn't reviewed to determine if wetlands and streams are drying up.
 - TAG recommends that the Map WF-7 Importance and Recharge by Landscape and Map WF-8. Degradation to Recharge, should be replaced with the USGS information Doug Kelly described.
- Discussion of Map WF-9. Restoration and Protection Priorities for Recharge by Landscape Group.
- Question for the Water Quality Specialists about whether in the field they are seeing diminished streams.
- Karen DuBose explained that they are not taking continuous water flow measurements and that their focus is primarily on monitoring water quality.
- Discussion of Map WF-10. Importance of Discharge by Landscape Group.
 - Stephen Stanley explained this map examines historic wetlands and identifies where discharge is likely occurring.
 - Question regarding how this relates to FWHCAs.
 - Stephen Stanley explains it relates to wetlands, streams, and estuaries,
 - Question regarding how this information is calculated.

- Stephen Stanley explains the calculations are area based and are normalized. It is not assumed there is a connection between recharge and discharge.
- Discussion of Map WF-11. Degradation by Nitrogen.
 - Stephen Stanley explained this map summarizes impact to wetlands. It uses road density and development density to assess the amount of development.
- Discussion of Map WF-12. Restoration and Protection Priorities for Discharge by Landscape Group.
 - Well density is one of the factors considered in discharge.
 - Question if tree maturity and evapotranspiration is considered.
 - Stephen Stanley's responded that they are not considered.
 - Question regarding the development on the north side of Dugualla bay. Suggestion that because this area is fairly developed that it potentially should not be green.
 - Stephen Stanley says to have a high degradation score then development would overlay slope wetlands. If this isn't the case then, he would like to examine what is occurring in this area to create the score it is receiving.
 - Question if tide gates are considered in the degradation model.
 - Stephen Stanley says tide gates are not considered in the model.
 - Suggestion that tide gate information be considered.
 - Doug Kelly suggested that discharge is more likely to be correlated with FWHCA than recharge because it is the output of water that creates habitat.
- Discussion of Map WF-13. Importance of Delivery by Landscape Group
 - Map examines timing of surface water movement to wetlands and streams and the control is the type of vegetation present.
- Discussion of Map WF-14. Degradation to Delivery
 - Question if model take prairies soils into account.
 - Stephen Stanley said he would have to double check.
 - Pat Powel said she forwarded some information on to Kira Swanson that has information about prairie soils and should be included.
- Discussion of Map WF-15. Restoration and Protection Priorities for Delivery by Landscape Group
 - Suggestion to put the restoration/development/conservation/ protection matrix on the maps.
 - Question regarding whether restoration refers to the likelihood of success of restoration efforts, or if it refers to where restoration is most likely positively impact ecosystem processes (greatest likelihood of success vs. biggest bang for your buck).
 - Stephen Stanley says restoration refers to both.
 - Concern from several TAG members that the City of Oak Harbor has a lot of restoration. However, Swantown is categorized for development.

- Stephen Stanley responded that he doesn't know why that is true, but he suspects that it is because the coastal and lowland units are being compared. He suggested rerunning the model and removing this distinction.
- Discussion regarding Map WQ-1. Export Potential of Sediment by Landscape group
 - This map is examining surface erosion and landslide hazard. The model does not provide quantities but it does provide information on areas that are likely to contribute. It is important to note that this map examines the role of sediment transport. In this map sediment transport is positive, meaning it should take place.
 - Question regarding major landslide hazard areas.
 - Stephen Stanley says major landslides are not factored into the analysis.
- Discussion regarding Map WQ-2. Degradation by Fine Sediment
 - This map examines change that has occurred from historic to present. Red is the amount of area that has changed the most. For example, a change from prairie to agriculture.
- Discussion regarding Map WQ-3 Restoration and Protection Priorities for Fine Sediment by Landscape Group.
 - In this map brown areas are sinks. Typically these sinks are wetlands that retain sediment and are not altered. Green areas are intact areas that should be protected.
 - Comment that it is difficult to see with the Urban Growth Area Boundaries.
 - Question how this relates to fish and wildlife.
 - Stephen Stanley suggests looking at the Kristoferson Watershed. He says if it is yellow this is suggesting that the coastal lagoon may be at risk due to erosion.
- Discussion of Map WQ-4. Export Potential of Phosphorus by Landscape Group
 - Question regarding what role phosphorus plays in water quality issues.
 - Stephen Stanley explains that it can be a big contributor and in Switzerland they highly regulate soil disturbance to limit phosphorus impacts.
 - Question regarding Island County's water quality sampling.
 - Karen DuBose explains that Island County samples for ortho phosphates, not total phosphorus.
 - Suggestion that this information would be more useful for the Comprehensive Plan update.
 - Jennifer Thomas responds that it is good to get that feedback. However, she said that nutrients can affect shellfish for example.
- Discussion of WQ-14. Degradation by Pathogens
 - Question if the model includes 303d data.

- Stephen Stanley says the model does not include 303d data.
- Suggestion that this be included.
- Stephen Stanley says there may be some instances where the local data can provide more detailed information than what the model provides. Pathogens may be one area where the County relies on local data.
- Karen DuBose explained that apart from the watershed at South Whidbey State Park, which is classified as red, but is one of the County's more natural sites, she said the majority of the map is consistent with her observations.
- Discussion regarding species and habitats of local importance.
 - Suggestion that species and habitats of local importance be included as column in decision matrix.
- Suggestion to include the information that was included in the Parks and Recreation element of the Comprehensive Plan. In this update habitat areas have been identified.

Discussion of Habitat Assessment Maps

- George Wilhere stated that numerous errors were identified in the map. In examining these errors he found the parcel data has errors in it. A major component in the model is land use as classified by parcel. For example, in the model public land around Deception Pass State Park is classified as private. He explains this a limitation of a coarse scale model.
 - Another issue he identified was related to agricultural areas. There are 12 vegetation zones that are used in the model. Out of 12 vegetation zones are prairie is the most important zone because they are the rarest most imperiled habitat type. The agricultural zone rates very highly because if prairies would often exist in the same areas as there is currently agriculture .
- Suggestion that there be a layer of protected lands (state and county parks, land trust, etc.).
- Question regarding connectivity because it doesn't appear to be examined in the maps.
 - George Wilhere responded that connectivity wasn't rated heavily in the analysis. He says if more information was desired on connectivity a separate analysis would need to be completed.
 - Comment that connectivity is an important component of island biogeography.
 - Jennifer Thomas asks George Wilhere what analysis he could do to resolve this issue.
 - George Wilhere says he didn't know without additional research. However, he does not want to rerun the model if the County isn't going to make a decision to protect connectivity in their update.
- Suggestion that everyone take time to review the maps and think about how they compare to local knowledge.

- Jennifer Thomas explains the purpose of the meeting was to provide TAG members with the background information that would enable them to be able to effectively review the maps.
- Jennifer Thomas explains that the decision matrix was created as a tool for TAG members to assess the maps or to identify if there is local data that may enhance the analysis.
 - Suggestion that column be added for 2016 update.
- George Wilhere says there is several policy questions that need answered. Specifically he wants to know how the County will use this model.
- Kira Swanson said that this is not the venue for policy discussions but she asked him to email her his questions and she would discuss them with her management.
- Discussion regarding whether activities within shoreline jurisdiction should be included in BAS review. Suggestion that legal opinion be requested from the Prosecuting Attorney. Kira Swanson said she has heard the TAGs concerns, she has asked for a Legal Opinion and this is matter that is being discussed internally.
- Suggestion that Watershed Characterization is not the best tool for the update and time would be better spent gathering local data.
- Question regarding whether the update would be assessing sensitive species. Emphasized that the update should be protecting sensitive species and habitats like prairies.
- Comment that there is no requirement to protect prairie unless it is adopted as a habitat of local importance.

Next Steps

- TAG members requested to complete the decision matrix and send their comments to Kira Swanson by 12:00 on Monday, October 28th.